FIG. 1

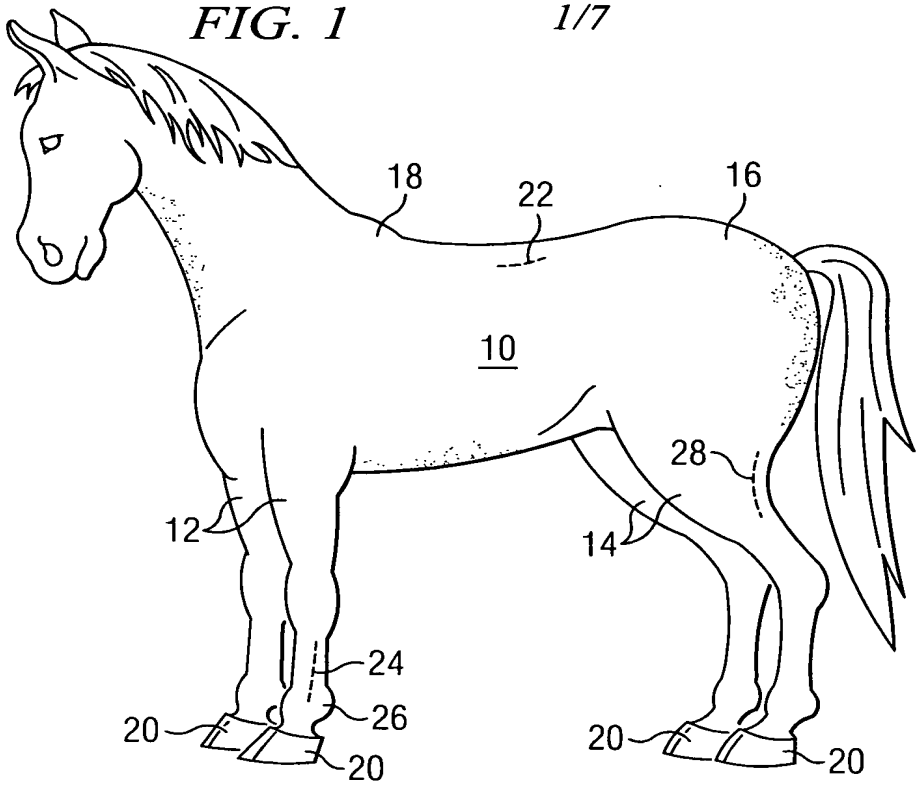

18
22
16
10
28
12
14
24
26
20
20
20
20

FIG. 8

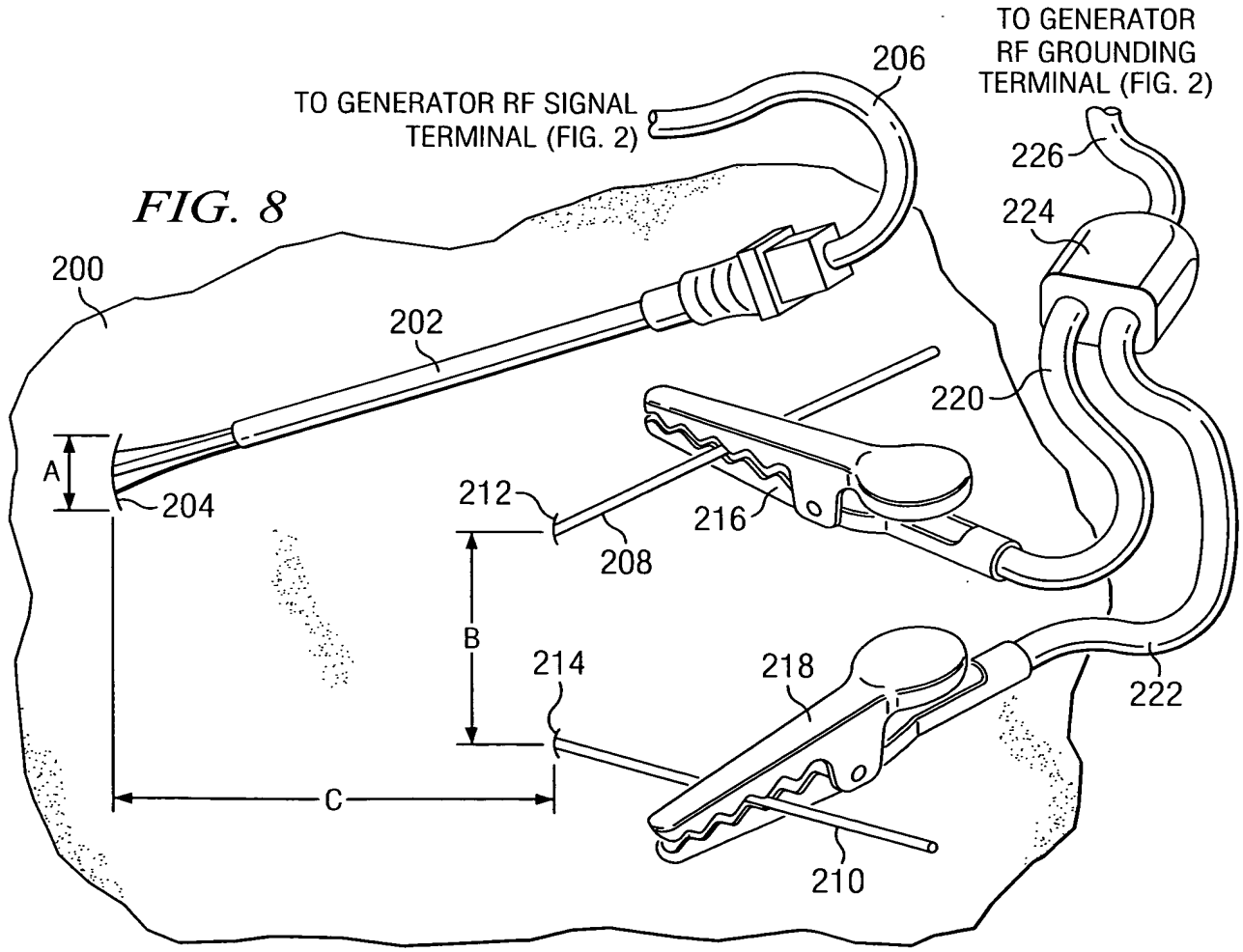
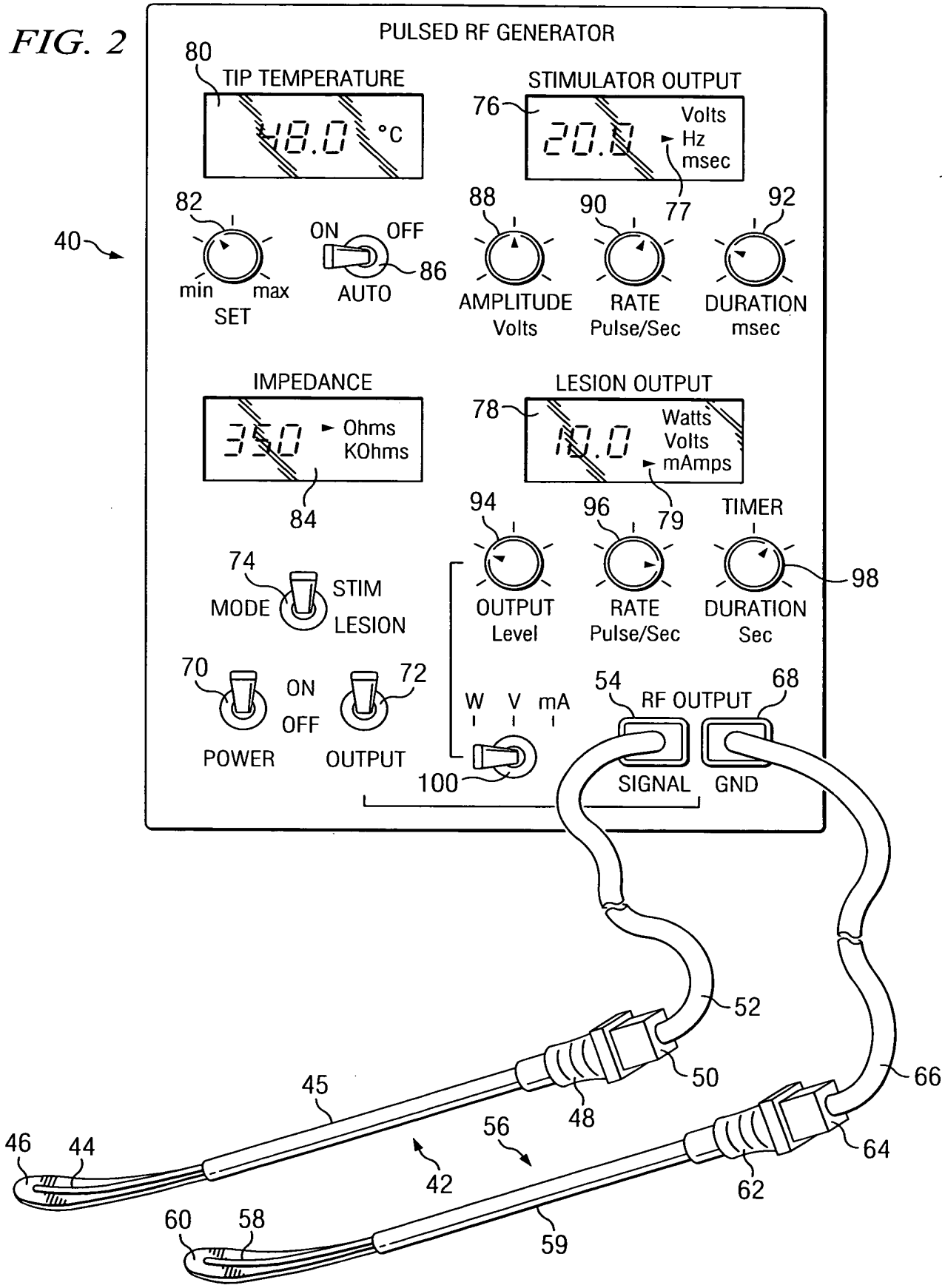

TO GENERATOR RF SIGNAL TERMINAL (FIG. 2)
206
TO GENERATOR RF GROUNDING TERMINAL (FIG. 2)
226
224
200
202
220
A
204
212
216
208
B
214
218
222
C
210

FIG. 2


PULSED RF GENERATOR
80
TIP TEMPERATURE
48.0 °C
STIMULATOR OUTPUT
76
20.0
Volts
Hz
msec
77
40
82
min
max
SET
ON
OFF
AUTO
86
88
AMPLITUDE
Volts
90
RATE
Pulse/Sec
92
DURATION
msec
IMPEDANCE
350
Ohms
KOhms
84
LESION OUTPUT
78
10.0
Watts
Volts
mAmps
79
94
OUTPUT
Level
96
RATE
Pulse/Sec
TIMER
98
DURATION
Sec
74
MODE
STIM
LESION
70
POWER
ON
OFF
72
OUTPUT
W
V
mA
100
54
RF OUTPUT
68
SIGNAL
GND
52
50
66
45
48
56
64
46
44
42
62
60
58
59

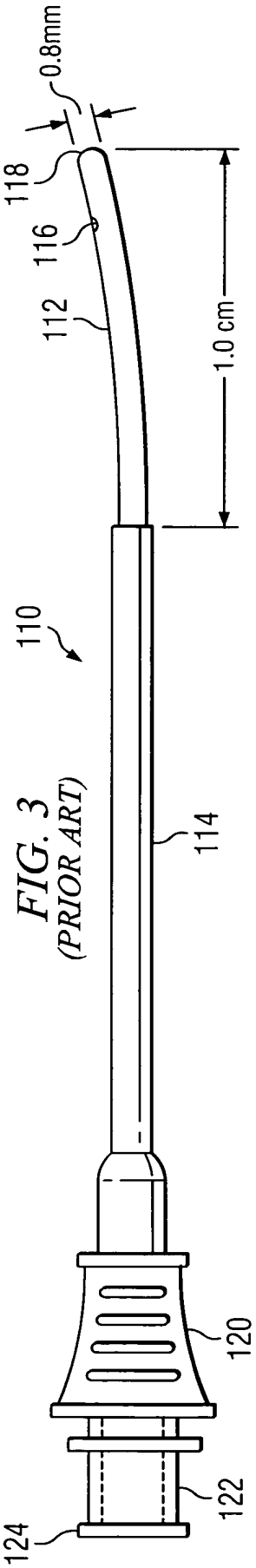


FIG. 3
(PRIOR ART)

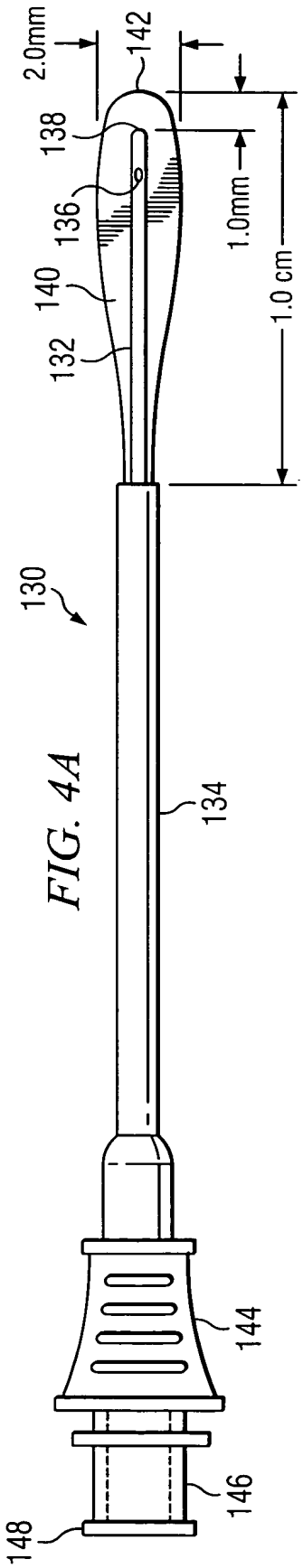


FIG. 4A

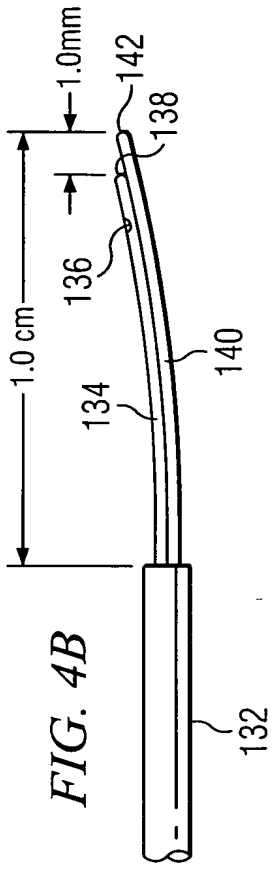


FIG. 4B

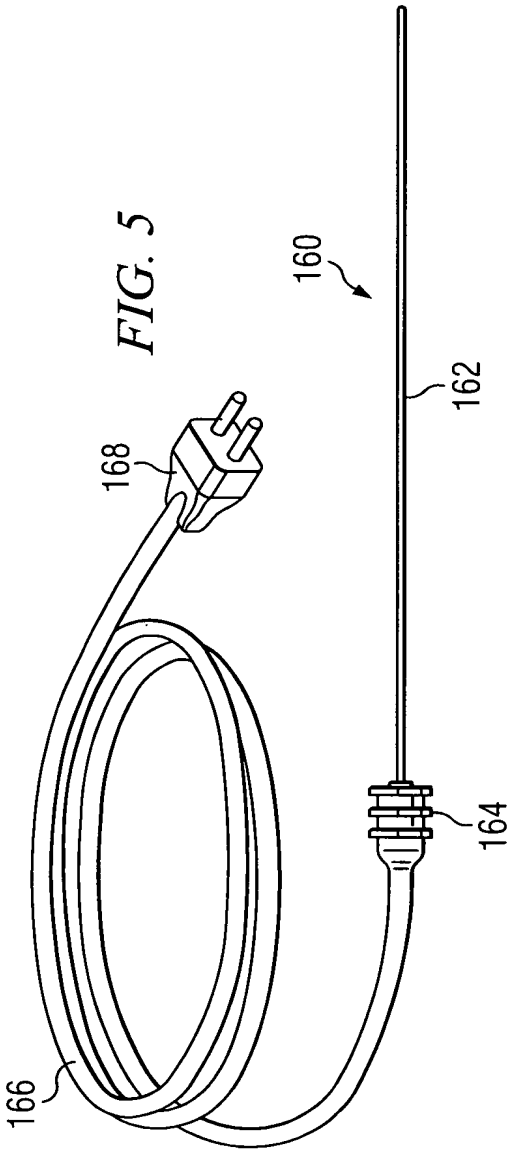


FIG. 5

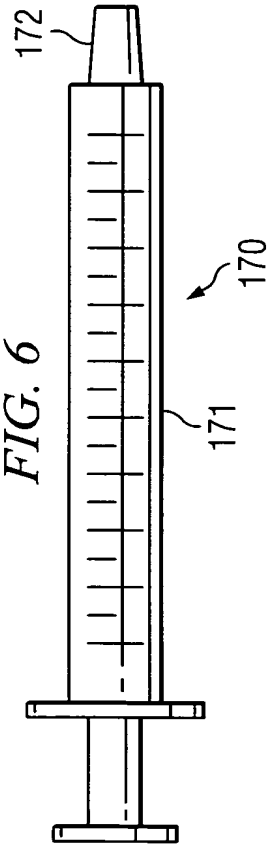


FIG. 6

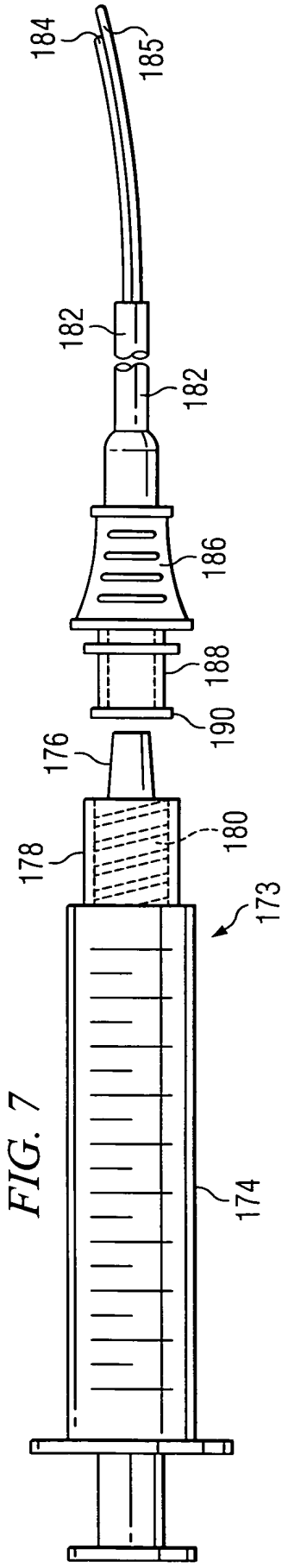


FIG. 7

FIG. 9A

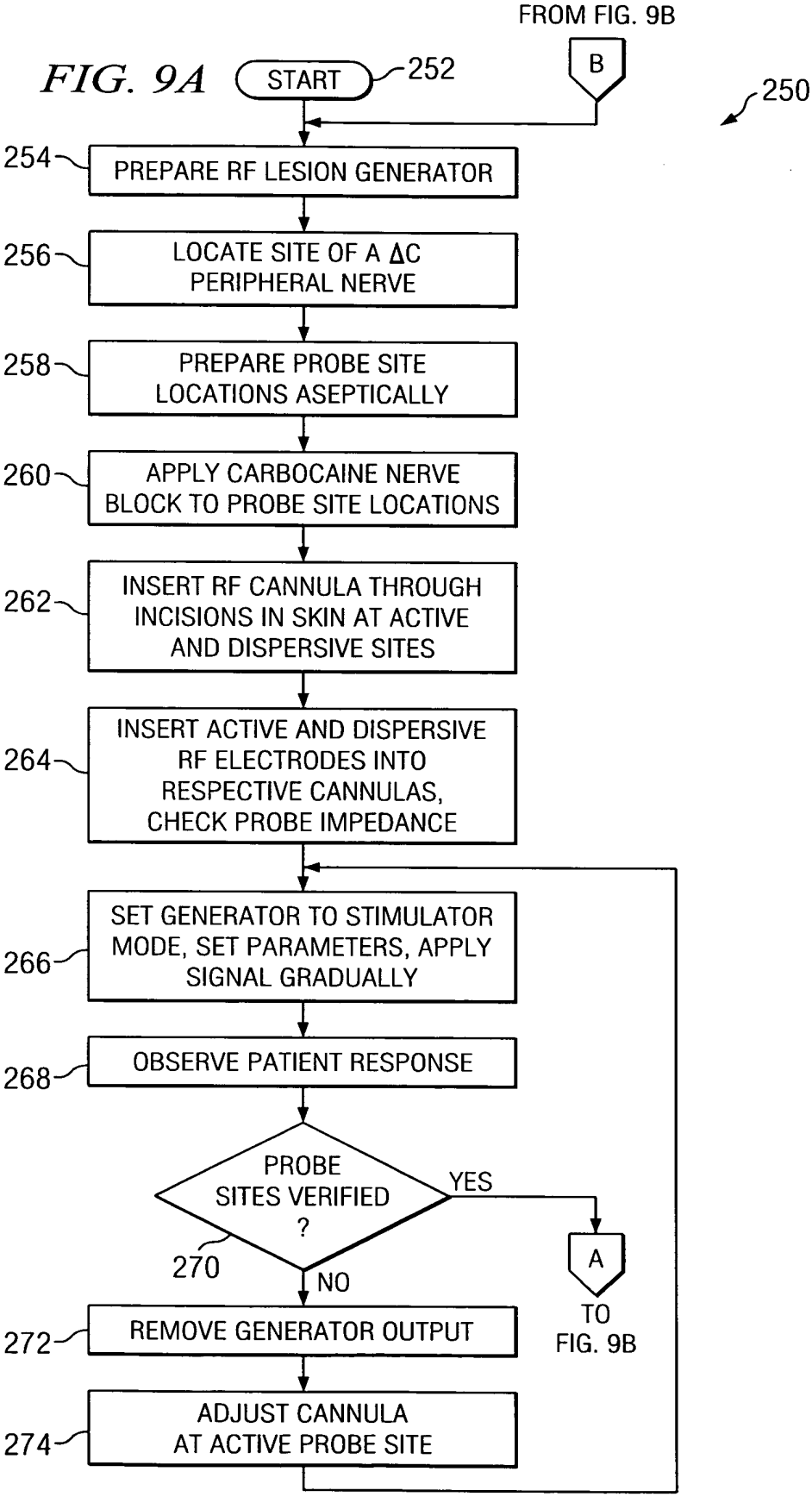

FROM FIG. 9B
B
START
252
250
254
PREPARE RF LESION GENERATOR
256
LOCATE SITE OF A ΔC PERIPHERAL NERVE
258
PREPARE PROBE SITE LOCATIONS ASEPTICALLY
260
APPLY CARBOCAINE NERVE BLOCK TO PROBE SITE LOCATIONS
262
INSERT RF CANNULA THROUGH INCISIONS IN SKIN AT ACTIVE AND DISPERSIVE SITES
264
INSERT ACTIVE AND DISPERSIVE RF ELECTRODES INTO RESPECTIVE CANNULAS, CHECK PROBE IMPEDANCE
266
SET GENERATOR TO STIMULATOR MODE, SET PARAMETERS, APPLY SIGNAL GRADUALLY
268
OBSERVE PATIENT RESPONSE
PROBE SITES VERIFIED ?
270
YES
NO
A
TO FIG. 9B
272
REMOVE GENERATOR OUTPUT
274
ADJUST CANNULA AT ACTIVE PROBE SITE

FIG. 9B

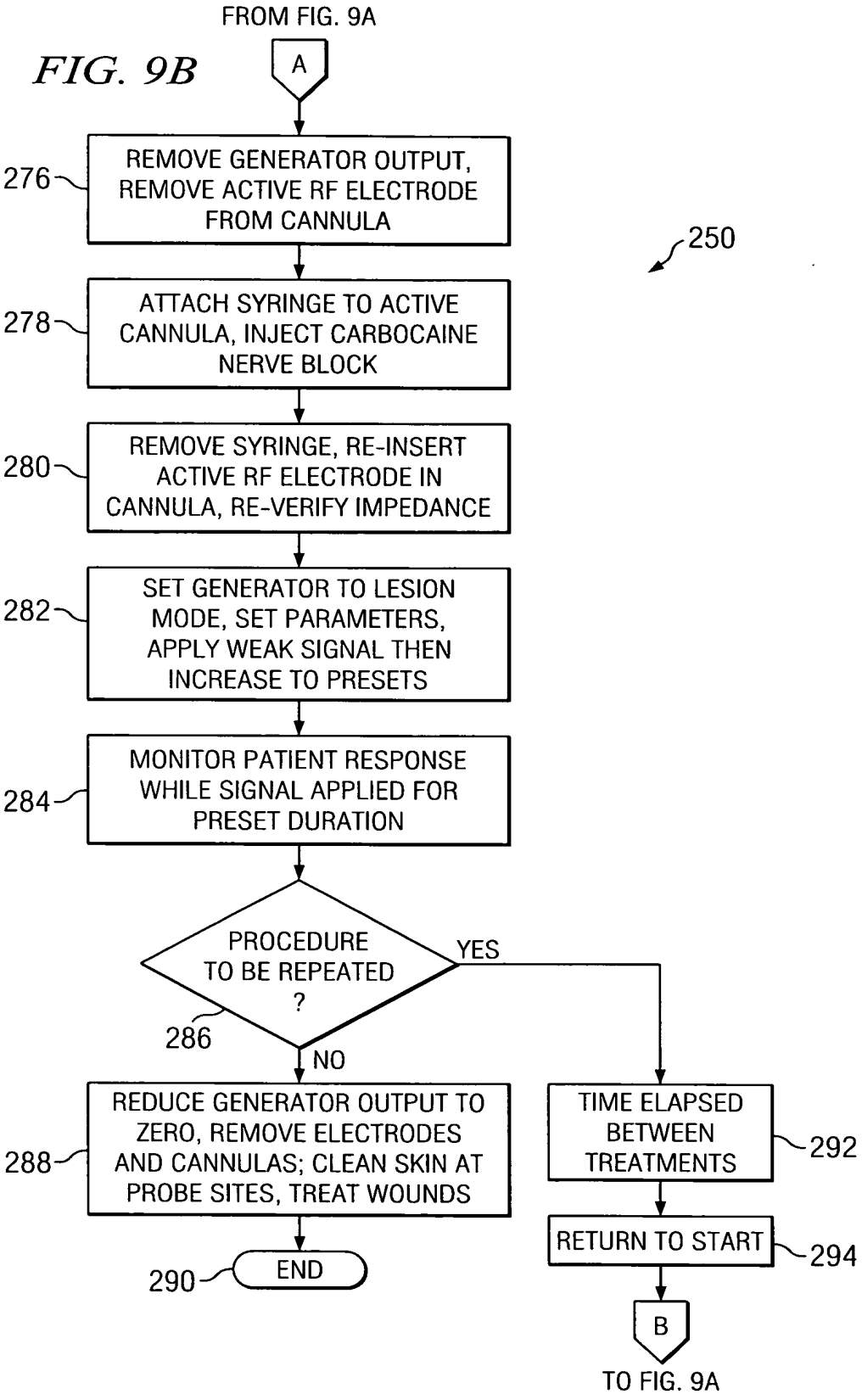

FROM FIG. 9A
A
276
REMOVE GENERATOR OUTPUT, REMOVE ACTIVE RF ELECTRODE FROM CANNULA
250
278
ATTACH SYRINGE TO ACTIVE CANNULA, INJECT CARBOCAINE NERVE BLOCK
280
REMOVE SYRINGE, RE-INSERT ACTIVE RF ELECTRODE IN CANNULA, RE-VERIFY IMPEDANCE
282
SET GENERATOR TO LESION MODE, SET PARAMETERS, APPLY WEAK SIGNAL THEN INCREASE TO PRESETS
284
MONITOR PATIENT RESPONSE WHILE SIGNAL APPLIED FOR PRESET DURATION
PROCEDURE TO BE REPEATED ?
286
YES
NO
288
REDUCE GENERATOR OUTPUT TO ZERO, REMOVE ELECTRODES AND CANNULAS; CLEAN SKIN AT PROBE SITES, TREAT WOUNDS
290
END
TIME ELAPSED BETWEEN TREATMENTS
292
RETURN TO START
294
B
TO FIG. 9A

FIG. 10

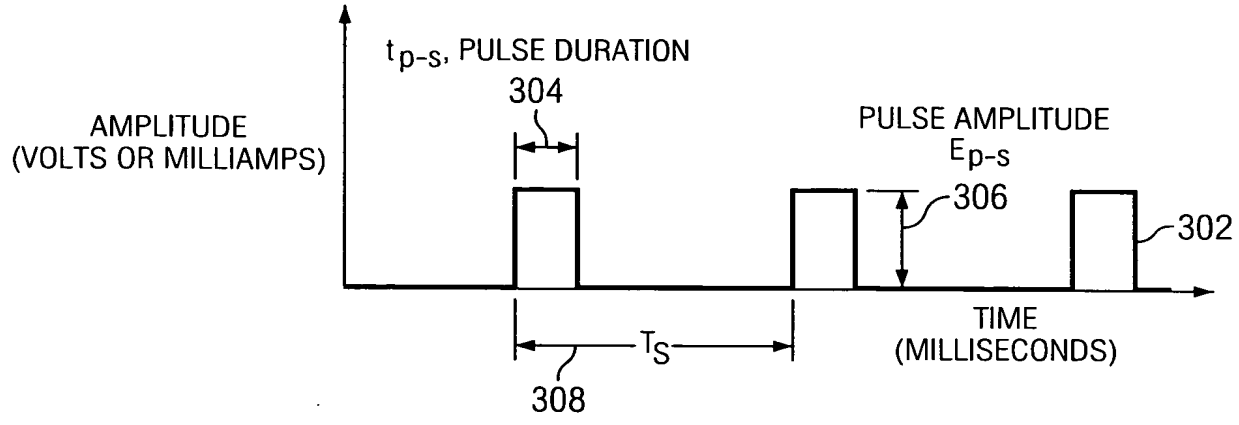
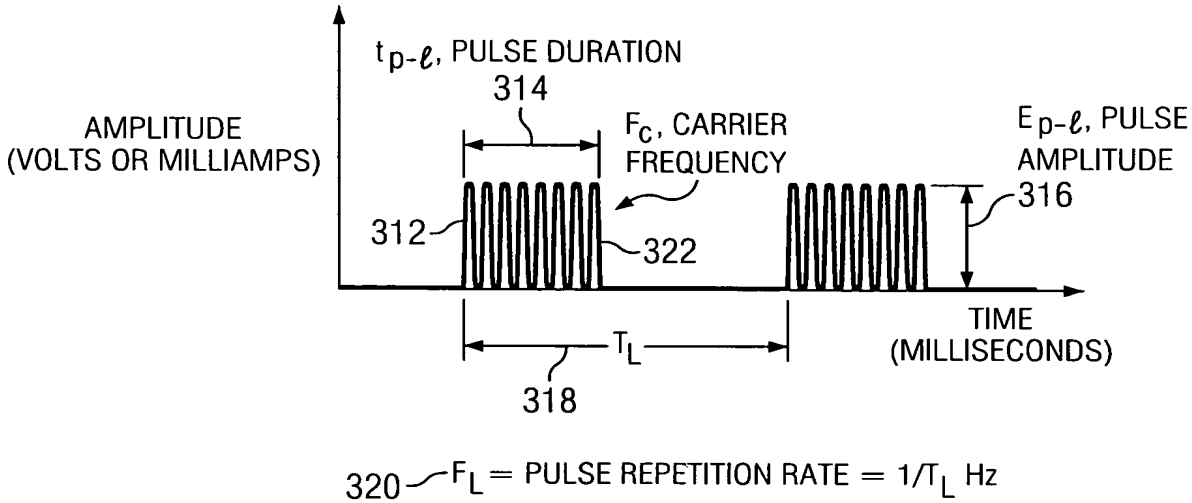

t_{p-s}, PULSE DURATION
304
AMPLITUDE
(VOLTS OR MILLIAMPS)
PULSE AMPLITUDE
E_{p-s}
306
302
T_S
TIME
(MILLISECONDS)
308
310
F_S = PULSE REPETITION RATE = $1/T_S$ Hz

FIG. 11


$t_{p-\ell}$, PULSE DURATION
314
AMPLITUDE
(VOLTS OR MILLIAMPS)
F_c, CARRIER
FREQUENCY
$E_{p-\ell}$, PULSE
AMPLITUDE
316
312
322
T_L
TIME
(MILLISECONDS)
318
320
F_L = PULSE REPETITION RATE = $1/T_L$ Hz